CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Lemhi Pass Timber Sale
Proposed Implementation Date:	September 15, 2006
Proponent:	DNRC/ Dillon
Location:	Lots 3 & 4 and E1/2SE1/4 Section 16, Township 10 South, Range 15 West
County:	Beaverhead

I. TYPE AND PURPOSE OF ACTION

Commercial timber sale to harvest an estimated 350 MBF of Douglas-fir and lodgepole pine timber from approximately 48 acres. Approximately 0.2 miles of minimum standard temporary spur road construction and 500 feet of minor road reconstruction would be needed to access the harvest units. Purpose of the action is to generate revenue for the common school trust; improve the health, vigor and productivity of the forest stands through the removal of overstocked timber; and reduce susceptibility to insect and disease and fire in the project area. (See Attachment A for site specific locations).

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project.

DNRC Resource Management Supervisor Gary Frank, DNRC Soil Scientist Jeff Collins and DNRC Forester Chuck Barone conducted a field review in October 2004.

Individual scoping notices were sent in January 2006. (See Attachment H – List of scoping notices).

Publication of a Legal Notice in the Dillon Tribune on January 18 and 25, 2006 and the Montana Standard on January 15 and 22, 2006.

Other contacts:

DNRC, Archaeologist, P. Rennie

FWP, Wildlife Biologist, C. Fager

Sun Mountain Lumber, Inc., B. Langsather

American Wildlands, K. Davitt

Lessee, Ed Mooney

Montana Natural Heritage Program

Montana Fisheries Information System

2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

The Beaverhead County Weed Board administers the State weed laws in Beaverhead County. The Weed Board is contacted by the DNRC and given a weed plan for each project.

A Beaverhead County burning permit would be required if slash burning is done.

Access to the State parcel would require a temporary road use agreement with a private landowner and a road use permit from the USFS.

3. ALTERNATIVES CONSIDERED:

Action Alternative A: Harvest approximately 350 MBF of overstocked timber from an estimated 48 acres of State land, located on Section 16-T10S-R15W.

Stand treatments would consist of harvesting all merchantable lodgepole pine sawtimber and approximately 55-60% of the merchantable Douglas-fir sawtimber from the harvest units. Harvest design is intended to maintain a semblance of historic conditions while improving forest health and productivity by reducing stand overstocking, fire hazard and susceptibility to insect and disease through the emulation of mixed severity and stand replacing fires. Approximately 0.2 miles of minimum standard temporary spur road construction and 500 feet of minor road reconstruction would be needed to access the harvest units. Excess slash would be consolidated at landings and burned.

No Action Alternative: Current management actions would be maintained and forest management and harvesting actions would be deferred. Opportunity to recover timber value through limited access would not be realized. These tracts are currently leased for grazing.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:
Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.

The proposed project area is located on moderate to steep slopes with soils weathering from alpine glaciated, volcanic bedrock of the Challis formation. Bedrock is shallow to moderately deep and fine textured soils have promoted numerous seasonally wet sites and isolated wetlands within the boundaries of units 4, 5 and 6. There are some areas of relict, shallow soil slumps in the wetlands, but no active instability.

Proposed harvest units 1 and 2 are located on shallow to moderately deep cobbly silt loam soils. These soils are well drained, but may remain moist late into the spring due to snowdrifts at this elevation. Vegetative growth on these soils is limited by cold climate and wind exposure. Primary soils concern is displacing shallow topsoils. Soils have a relatively long dry or frozen season of use when operability should not cause adverse effects.

Proposed harvest units 4, 5 and 6 are located on 10-40% slopes with moderate to deep soils of finer textured cobbly silty clay loams. These soils are well to poorly drained and include isolated wetlands that appear to occur as perched water on the clay rich soils in swales and concave slope positions. Seasonally wet sites support spruce. Surface soil depths vary from 6-8 inches of silt loam that appears to be wind blown deposits. The wetland spots have deep black organic surfaces with low bearing strength. Erosion potential is moderate to high, but surface water is not connected. These soils are slightly higher productivity sites than the ridgeline unit. Primary soil concern is rutting and compaction by equipment if operations on soils when wet.

There is an existing access road to the site, across private and state lands, that is low standard and mainly vegetated. Some road segments with short steep grades will need additional road surface drainage as drain-dips. The proposed spur road would involve minor side slope excavation of 1-3 feet, and can be easily stabilized with standard drain-dips and grass seeding following use. Erosion potential is moderate and material quality is adequate for low-standard, temporary road construction and use.

The proposed harvest would remove overstory trees and reduce overstocking. The primary soil concerns are potential rutting, disturbance and erosion associated with harvest operations. The proposed harvest would cause limited disturbance and moderate to low risk of direct, in-direct or cumulative effects based on implementation of Best Management Practices (BMP's) and recommended mitigations measures. Mitigations

include skid trail planning, limiting season of use to dry or frozen conditions and installing adequate drainage and woody debris. Existing roads would have surface drainage maintained or added as needed to meet BMP's. Disturbed soils on existing roads and landings would be grass seeded to control erosion and compete with weeds.

(See Attachment C – Geology and Soil Assessment)

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:
Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.

The proposed project is located within a single parcel of State land (Section 16 Township 10 south, Range 15 west) that is located in the headwaters of the Trail Creek watershed. Trail Creek is a tributary to Horse Prairie Creek within the Beaverhead River Basin.

The Missouri River drainage, including tributaries to the Beaverhead River, is classified as B-1 in the Montana Surface Water Quality Standards. The B-1 classification is for multiple use waters suitable for domestic use after conventional treatment, growth and propagation of cold-water fisheries, associated aquatic life and wildlife, agricultural, and industrial uses. Among other criteria for B-1 waters, no increases are allowed above naturally occurring concentrations of sediment, which will prove detrimental to fish or wildlife. The State has adopted Forestry Best Management Practices through its Nonpoint Source Management Plan as the principle means of controlling nonpoint source pollution from silvicultural activities.

Downstream beneficial uses in Trail Creek include: domestic, irrigation, livestock watering, wildlife, and cold-water fisheries. Trail Creek has not been identified on the State's 303(d) list of impaired bodies of water in need of TMDL development.

The mainstem of Trail Creek is not located within the immediate project area. The proposed harvest area does contain several isolated wetlands, springs and discontinuous unnamed Class II and Class III tributaries to Trail Creek. A segment of Trail Creek located approximately 0.75 miles down slope of the proposed harvest area supports a known population of Westslope cutthroat trout. However, there is no surface delivery of channelized flow or concentrated runoff from the proposed harvest area to Trail Creek.

Existing road density and past timber harvests within the Trail Creek watershed are at lower levels. Road densities appear to be less than 1 mile of road per square mile of watershed. The estimated harvested area in this watershed is less than 2% of the total watershed area. These levels are well below the levels of forest management activity that are normally associated with increased water and sediment yields. Therefore, it is unlikely that there are measurable cumulative effects on stream flow regimes (water yield, magnitude, and duration of peak flows) and sediment yield due to forest road construction and vegetation manipulation in the Trail Creek drainage.

Current and historic grazing practices have caused detrimental impacts to the ephemeral draws, isolated segments of stream channel and wet areas occurring within the proposed project area. Stream bank and wetland livestock trampling and subsequent erosion has lead to increased levels of in-stream sedimentation. While these impacts are occurring to a limited extent within the proposed project area on the State parcel, they do not appear to impacting downstream water quality or downstream beneficial uses due to the discontinuous nature of drainage features occurring within the proposed project area.

The proposed activities would result in harvest of approximately 350 MBF from 5 harvest units totaling approximately 48 acres in size, and approximately 0.2 miles of new road construction, 500 feet of minor road reconstruction and minor improvements to approximately 5725 feet of existing road (2556' located on State and 3169' on private ownership). Minor improvements will consist of adding additional road surface drainage features where needed. A majority of the existing road will be used without any reconstruction or improvements. All of these proposed activities are located in the Trail Creek watershed. No new stream or reconstructed stream crossing are proposed.

All segments of discontinuous stream, wetlands and well-defined ephemeral draws would be either excluded from timber harvest or would incorporate equipment restrictions to prevent excessive levels of soil disturbance and erosion. Timber harvest and road activities would implement all applicable forestry BMP's to avoid or minimize the risk of soil erosion and potential for sediment delivery. Therefore, no direct or indirect impacts to downstream beneficial uses including the cold-water fisheries in Trail Creek are anticipated

The proposed levels of timber harvest are not expected to contribute to adverse cumulative watershed impacts due to modified stream flow regimes. The existing and proposed levels of harvest are well below the levels normally associated with detrimental increases in water yield, peak flow, or duration of peak flows. Subsequently, no direct, indirect, or cumulative impacts to water quality or beneficial uses are anticipated to result from bank destabilization and in-stream sedimentation. No direct, indirect, or cumulative impacts to water quality or beneficial uses in Trail Creek are expected to result from the proposed actions.

(See Attachment D – Watershed Assessment)

6. AIR QUALITY:
What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

The project includes piling and burning of logging slash. Localized short duration particulate emissions occur during slash burning. Slash burning is normally conducted in late October through November. The DEQ and the Cooperative Airshed groups regulate particulate emissions during this period. Burning times are coordinated to 1) limit burning periods of acceptable smoke dispersion and 2) to limit the cumulative generation of particulates.

7. VEGETATION COVER, QUANTITY AND QUALITY:
What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.

The proposed project is located on the east side of the Beaverhead Mountains in the upper reaches of Trail Creek drainage. State ownership within the project area is ~132 acres of which 80 acres are forested. Adjacent ownership to the north is the Beaverhead-Deerlodge National Forest and to the west is BLM in Idaho, the remaining adjacent ownership is private lands.

Lands within the proposed project area occur in open, rolling country with generally broad and gentle ridge tops. Vegetation is a complex of grass range with mosaic stands of Douglas fir and lodgepole pine. Ridgelines and exposed southerly aspects are essentially rangeland and are either nonforested or sparsely stocked with noncommercial timber stands. Slopes range from 10-40% with an elevation range of 7,100 feet to 7,600 feet.

Stands of timber occur predominately on north facing slopes and are primarily a Douglas-fir cover type. Douglas-fir/pine grass habitat types (Psme/Caru) are found on the drier sites with Douglas-fir the climax dominant and lodgepole pine as the major seral species. Stand composition ranges from dense mature forest to heavily overstocked and stagnant forest to open mature and young encroachment forest. Regeneration is sparse with moderate understory vegetation and coarse woody debris present. Subalpine fir/pine grass habitat types (Abla/Caru) are found on the cooler, moister sites with subalpine fir the apparent climax species but Douglas-fir and lodgepole pine tend to dominate the stands as major serals. These stands are comprised of densely stocked and moderately stocked forest. Regeneration and understory vegetation is moderate with moderate to heavy coarse woody debris and cattle use is heavy in all stands. The absence of fire, in combination with encroachment, has resulted in overstocked and suppressed stands. These conditions make the stands more susceptible to fire and attack from insects and disease. There is currently more total forest cover in Beaverhead County than in prior historical conditions.

Old trees do occur within the proposed project area but are generally found as scattered individuals and small clumps (<5 acres) of old relic trees. A small stand of old growth Douglas-fir occurs within the northeast quarter of the State parcel (~11.5 acres), of which approximately 6.5 acres are found in harvest Unit 5 and is presently

experiencing Douglas-fir bark beetle infestations. Historically, these remnants were typically naturally fragmented, open-park like communities maintained by frequent low intensity fires. The present percentage of old growth cover types on State lands is nearly twice the estimated percentage that is likely to have historically occurred on State lands in Beaverhead and Madison Counties. Older, large trees would be harvested, where applicable, while still retaining many of the old growth characteristics of the existing stands. Large live trees, snags and coarse woody debris, which are important attributes associated with old growth and future development of old growth, would be retained in sufficient quantities when applicable. The harvest of old growth under this proposal would have a negligible cumulative effect on the percentage of old growth remaining on State lands in Beaverhead and Madison Counties.

The following harvest prescription would be implemented on the State lands, which is based on the harvest prescription employed on the adjoining private ownership and is a requirement for allowing access to the State lands:

Healthy Douglas-fir trees, exhibiting no outward signs of beetle infestation, would be selectively harvested on an approximated 30 foot x 30 foot spacing with Douglas-fir trees greater than 24 inches in diameter at stump height given retention priority over Douglas-fir trees less than 24 inches in diameter at stump height. Douglas-fir beetle killed and/or infested trees and mountain pine beetle killed and/or infested trees occurring within the harvest units would be salvaged harvested where encountered. Engelmann spruce and lodgepole pine trees would be selectively harvested on an approximated 25 foot x 25 foot spacing. Douglas-fir would have the highest retention priority, lodgepole pine the second and Engelmann spruce the third. Sub-merchantable trees would be protected where possible.

Douglas-fir bark beetle is present with the larger, older Douglas-fir trees having been the most affected and are showing a high mortality. Light to moderate spruce budworm damage is apparent in the upper crowns of Douglas-fir and spruce. Light to moderate Dwarf mistletoe infestations are present and a minor infestation of Mountain Pine beetle is present in the stands with lodgepole pine. High stand densities, multi-storied stand structure, and climax host species, in conjunction with a prolonged drought, has provided for a more serious insect and disease outbreak and elevated risk to the remaining stand. Open stands where tree growth and vigor is encouraged and a variety of age classes are developed are more resistant to insect and disease infestations.

Harvesting an estimated 350 MBF of timber would alter the forest cover on approximately 48 acres. Harvest design is intended to promote forest health and productivity, address insect and disease infestations while maintaining a semblance of historic conditions through emulating mixed severity and stand replacing fires. Natural regeneration would be expected.

No rare plants or cover types have been noted by the Montana Natural Heritage Program or observed within the project area.

The DNRC requires the washing of equipment, seeding of grass and monitoring of disturbed areas to minimize the potential of noxious weeds being introduced. There is low risk of direct, indirect, or cumulative impacts due to weeds.

(See Attachment E – Vegetative Analysis/Stand Prescription)

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:
Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.

A variety of big game, small mammals, raptors and songbirds potentially use this area. Trail Creek has several cold-water fisheries, including mottled sculpin, brook and westslope cutthroat trout. No roads or harvest units are located along any drainage features that would contribute to this drainage.

The project area lies within the Tendoy Elk Management Unit and Hunting District 328. Hunter crowding and better hunter access are primary concerns expressed by DFWP in this hunting district. This area also “provides important spring, summer and fall habitat for elk” (C. Fager, FWP, Letter, January 24, 2006).

Although security cover is limited in the proposed project area, no significant impacts to wildlife are anticipated due to the type of silvicultural prescription, the size of the proposed harvest units and physical closure of any

new road construction and skid trails. Entry through main access route is limited due to private ownership, which would help minimize any potential increase in elk vulnerability.

Due to the size, season, duration and harvest method of the proposed project, minimal construction and additional recommended mitigation measures, no impacts are expected to wildlife and fisheries habitats.

(See Attachment D, F & G – Watershed Assessment; Checklist for Endangered, Threatened and Sensitive Species; Montana Natural Heritage Program/ Montana Fisheries Information System)

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:
Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.

No threatened or endangered species are known to have been documented within the proposed project area. Preferred habitat for grizzly bear and bald eagles is not present or marginal within the proposed project area. Occasional use of the area from these species could potentially occur but is generally considered outside of their normal occupied habitat.

The proposed project lies within the Central Idaho Nonessential Experimental Wolf Recovery Area. The nearest packs in the vicinity of the project area are the Moyer (Idaho) and Gravelly (Montana) packs. Individuals from these packs or transients from other packs could occasionally use portions of the project area, however, due to the size, nature and location of the proposed project, activities associated with this proposal are not expected to affect wolves or recovery efforts.

The proposed project area is located along the fringes of preferred lynx habitat. Mature foraging and young foraging habitats, and habitats high in coarse woody debris that are preferred for denning, are not prevalent within the State parcel. Lynx habitat is marginal within the proposed project area due to the lack of highly desirable habitat conditions for lynx and their primary prey, snowshoe hares. Adverse direct, indirect or cumulative impacts to lynx as a result of this project are expected to be minimal.

Of the cold-water fisheries within the area, the primary species of interest is westslope cutthroat trout (WCT). WCT are listed as a Class-A Montana Animal Species of Concern and identified by the Department of Natural Resources and Conservation (DNRC) as a sensitive species. WCT have been documented in Trail Creek, located one-half of a mile to the east of the proposed project area and North Frying Pan Creek, located three-quarters of a mile to the south of the proposed project area. No roads or harvest units are located along any drainage features that would contribute to either of these drainages. No direct or indirect effects to the fisheries within these watersheds are expected from the proposed action.

A plant species of concern, Lemhi Beardtongue, has been documented approximately one-half mile to the east of the proposed project area along Trail Creek. No sensitive species/species of special concern have been documented or observed within the proposed project area.

Due to the size, season, duration and harvest method of the proposed project, minimal road construction and additional recommended mitigation measures, no impacts are expected to occur to any endangered, threatened or sensitive species.

(See Attachments D, F & G – Watershed Assessment; Checklist for Endangered, Threatened and Sensitive Species; Montana Natural Heritage Program/Montana Fisheries Information System)

10. HISTORICAL AND ARCHAEOLOGICAL SITES:
Identify and determine effects to historical, archaeological or paleontological resources.

There are no cultural resource concerns within the proposed project area. No additional archaeological investigative work is recommended prior to harvest activities.

11. AESTHETICS:
Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.

The proposed project area is not visible to any populated area. Although the proposed project is in close proximity to the Continental Divide Trail and the Sacajawea Memorial, due to the gentle topography and proposed harvest design impacts concerning aesthetics are not expected.

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:
Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.

None.

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:
List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

DNRC adopted the Administrative Rules for Forest Management on March 13, 2003, applicable to management activities on forested State lands.

In June 2000, the Frying Pan Rail Permit EA was prepared. ~58 MBF has currently been harvested from ~25 acres in Sections 21 and 28-T10S-R15W. In June 1990, the South Frying Pan Timber Sale EA was prepared. 1,003 MBF of sawtimber was harvested from 92 acres in Sections 21, 22, 27 and 28-T10S-R15W. In December 1987, the South Frying Pan Timber Permit EA was prepared. 42 MBF of sawtimber was harvested from 8 acres in Section 28-T10S-R15W. In August 1987, the Frying Pan Timber Permit EA was prepared. 182 MBF of sawtimber was harvested from 13 acres in Section 36-T10S-R15W. In December 2004, the Bear Bottom Limited Access Timber Sale EA was prepared. 1,000 MBF of sawtimber was harvested from121acres in Sections 22, 26, 27, 28 & 36-T10S-R15W.

A range evaluation was conducted in October 2003.

No cumulative impacts are expected.

IV. IMPACTS ON THE HUMAN POPULATION

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

14. HUMAN HEALTH AND SAFETY:
Identify any health and safety risks posed by the project.

NONE

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:
Identify how the project would add to or alter these activities.

NONE

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:
Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.

People are currently employed in the wood products industry. Due to the relatively small size of the timber sale program, there will be no measurable cumulative impact from this proposed action on employment.

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:
Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.

People are currently paying taxes from the wood products industry in the region. Due to the relatively small size of the timber sale program, there will be no measurable cumulative impact from this proposed action on tax revenues.

18. DEMAND FOR GOVERNMENT SERVICES:
Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services.

There will be no measurable cumulative impacts related to demand for government services due to the small size of the timber sale program, the short-term impacts to traffic and the small possibility of a few people temporarily relocating to the area.

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:
List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

In March 2003, DNRC adopted the Administrative Rules for Forest Management ARM 36.11.401 through 36.11.450 (the "Rules"). This project is planned under the requirements of the Rules.

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:
Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.

Persons having legal access to the tract and possessing a valid state lands recreational use license or FWP conservation license may conduct recreational activities on the tract. The proposed project would not affect the existing access for the general public.

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:
Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.

There will be no measurable cumulative impacts related to population and housing due to the relatively small size of the timber sale program, and the fact that people are already employed in this occupation in the region.

22. SOCIAL STRUCTURES AND MORES:
Identify potential disruption of native or traditional lifestyles or communities.

NONE

23. CULTURAL UNIQUENESS AND DIVERSITY:
How would the action affect any unique quality of the area?

NONE

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:
Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.

The estimated return to the trust would be $55,363.00 (350 MBF of tractor sawtimber @ $158.18/MBF). This estimate is intended for comparison of alternatives, not as an absolute estimate of return.

Income from a grazing license of $126.04/year for 23 AUM of use would continue with or without the harvest proposal.

EA Checklist Prepared By:	**Name:**	Chuck Barone	**Date:**	August 1, 2006
	Title:	Dillon Unit Forester		

V. FINDING

25. ALTERNATIVE SELECTED:

After review and consideration, I have selected the proposed Action Alternative, to harvest approximately 350 MBF of overstocked and insect damaged timber from an estimated 48 acres of State Trust land and to construct approximately .2 miles of minimum standard, temporary new spur road and perform minor road reconstruction on 500 feet of current existing road to access the harvest units. I believe this alternative can be implemented in a manner that is consistent with the long-term sustainable natural resource management of the area while promoting forest health, diversity, and generating revenue for the common schools trust from timber harvest.

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

I conclude all identified potential impacts will be avoided or mitigated by the project size, short duration, timing, design, contract provisions, BMP compliance, and project administration, and no significant impacts will occur as a result of implementing the selected alternative.

MEASURES RECOMMENDED TO MITIGATE POTENTIAL IMPACTS:

1) Compliance with Forestry Best Management Practices (BMP's) and Streamside Management Zone (SMZ) laws. Protect all draws, springs and wet areas with marked equipment restriction zones (ERZ) as needed.
2) Limit equipment operations to periods when soils are dry, frozen or snow covered to minimize soil compaction, rutting and vegetative disturbance. Provide adequate skid trail planning. Limit equipment operations to $\leq$ 45% slopes.
3) Retain five to ten tons per acre of woody material larger than 3 inches diameter to be left scattered throughout the sale units. Slash would be left in the harvest units where feasible for erosion control and

nutrient cycling. Skid trails and new road construction would be physically closed with slash and debris upon completion of use.

4) Install proper and adequate road drainage such as drain-dips to control erosion from roads. Install and maintain all road surface drainage concurrent with harvest activities, construction and reconditioning. Provide effective sediment filtration along drainage features located in areas with inadequate buffer capacity to channel.
5) All road construction and logging equipment will be power washed and inspected prior to being brought on site. Sale area will be monitored for weeds following harvest and a treatment plan will be developed should noxious weeds occur.
6) At sale closure, grass seed roads, skid trails (where needed) and landings with an appropriate seed mixture.
7) One snag and one snag recruit per acre, of the largest diameter class, will be retained where applicable. Cull live trees and cull snags will be retained where applicable.
8) Retain sufficient older trees and stand attributes suitable for old growth development where available and applicable.
9) Contact DNRC wildlife biologist should any threatened or endangered species be encountered within the proposed project area.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

	EIS		More Detailed EA	X	No Further Analysis

EA Checklist Approved By:	**Name:**	Richard A. Moore
	Title:	Dillon Unit Manager
Signature: / s / Richard A. Moore		**Date**: August 7, 2006

ATTACHMENTS

A – Vicinity/Site Specific Map
C – Geology and Soils Assessment
D – Watershed Assessment
E – Vegetative Analysis/Silvicultural Prescription
F – Checklist for Endangered, Threatened and Sensitive Species
G – Montana Natural Heritage Program/
Montana Fisheries Information System
H – List of Individual Scoping Notices